

Claims

1. A supplementary airplane cabin heat delivery device for use with an airplane with an air cooled piston engine partially enclosed by a cowling with an air inlet in said cowling; said engine including an enclosed exhaust system for allowing exhaust gases to exit said air cooled piston engine; said device comprising: at least one electrically powered blower connected to said air inlet in said cowling; said electrically powered blower having an inlet and an outlet; said blower outlet being connected to an inlet of an elongated heat shroud used for collecting heat from said aircraft engine exhaust system; wherein said outlet from said heat shroud is ducted into said airplane cabin to deliver heated air to said airplane cabin when said air cooled piston engine is in operation and said airplane is in taxiing and stationary positions; and said blower replacing ram air which is used to heat said cabin when said aircraft is in flight.
2. A supplementary airplane cabin heat delivery device as in Claim 1 wherein said electrically powered blower is an axial blade blower.
3. A supplementary airplane cabin heat delivery device as in Claim 1 wherein said heated air is ducted to an airplane windshield defrost system.
4. A supplementary airplane cabin heat delivery device as claimed in Claim 3 wherein at least two said electronically powered blowers are connected in series to deliver heated air to said airplane cabin and said windshield defrost system.
5. A supplementary airplane cabin heat delivery device as claimed in Claim 1 wherein a second electrically powered blower is connected in series to said at least one blower for increasing volume of heated air for delivery to said airplane cabin and windshield defrost system.
6. An auxiliary heating and defrosting system adapted to provide warmed air to a cabin of a small aircraft; said system including at least one blower, connected to a flange, and an engine compartment baffle wall; said flange being also connected to said engine compartment baffle wall around a pre-existing air intake aperture; said system also including an air duct hose and a first clamp; said clamp being adapted to secure a first end of said air duct hose around an air outlet end

of said blower; said air duct hose also including a second end; said second end being connected by a second clamp to a muffler shroud air intake aperture; said muffler shroud also including an air outlet aperture connected to a cabin air intake hose; said muffler shroud including and enclosing an air space about an exhaust muffler; said exhaust muffler and said muffler shroud forming existing portions of an exhaust system of a small aircraft engine; said system also including electrical circuit breaker wiring and an on/off circuit breaker switch; said electrical circuit breaker wiring being connected to an electrical source in said aircraft, said blower, and said circuit breaker switch; said switch being located in said small aircraft cabin; wherein, in operation, when said circuit breaker switch is in an "on" position, said blower forces air through said muffler shroud into said cabin.

7. A system as claimed in Claim 6 including a pair of blowers connected to a pair of flanges attached around a pair of pre-existing air intake apertures in said engine compartment baffle wall; each of said blowers being connected to an air duct hose; said system further including a pair of exhaust mufflers; each of said air duct hoses being connected to a muffler shroud air intake aperture in one of said exhaust mufflers; each of said exhaust mufflers including one air outlet aperture leading from said muffler shroud to a cabin air intake hose.

8. A system as claimed in Claim 6 wherein said pre-existing air intake aperture is located in a front engine compartment baffle wall.

9. A system as claimed in Claim 6 wherein said pre-existing air intake aperture is located in a side engine compartment baffle wall.

10. A system as claimed in Claim 6 wherein said pre-existing air intake aperture is located in a rear engine compartment baffle wall.

11. A system as claimed in Claim 6 wherein an air scoop is located on an outside portion of said engine compartment baffle wall adjacent said aperture.

12. A system as claimed in Claim 6 wherein said blower is located within said air duct hose.

13. A system as claimed in Claim 6 wherein said at least one blower is coupled in series with a second blower embedded in an air duct hose to increase cabin air flow.